

# ENF Environmental Notification Form

*For Office Use Only*  
*Executive Office of Environmental Affairs*

EOEA No.: *14215*  
 MEPA Analyst: *Anne Canaday*  
 Phone: 617-626-*1035*

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

<b>Project Name: Mill/Keveney Lane Bridge Rehabilitation Project</b>		
<b>Street: Mill Lane and Keveney Lane</b>		
<b>Municipality: Barnstable and Yarmouth</b>	<b>Watershed: Cape Cod</b>	
<b>Universal Tranverse Mercator Coordinates: 19 394948E 4617828N</b>	<b>Latitude: 41° 42' 26"N</b>	<b>Longitude: 70° 15' 46"W</b>
<b>Estimated commencement date: 10/2008</b>	<b>Estimated completion date: 10/2009</b>	
<b>Approximate cost: \$129,000</b>	<b>Status of project design: 100% Complete</b>	
<b>Proponent: Town of Barnstable Department of Public Works</b>		
<b>Street: 200 Main Street</b>		
<b>Municipality: Hyannis</b>	<b>State: MA</b>	<b>Zip Code: 02601</b>
<b>Name of Contact Person From Whom Copies of this ENF May Be Obtained: Gene F. Crouch</b>		
<b>Firm/Agency: Vanasse Hangen Brustlin, Inc.</b>	<b>Street: 101 Walnut Street</b>	
<b>Municipality: Watertown</b>	<b>State: MA</b>	<b>Zip Code: 02471</b>
<b>Phone: (617) 924-1770</b>	<b>Fax: (617) 923-2336</b>	<b>E-mail: gcrouch@vhb.com</b>

- Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?  
 Yes  No
- Has this project been filed with MEPA before?  
 Yes (EOEA No. \_\_\_\_\_)  No
- Has any project on this site been filed with MEPA before?  
 Yes (EOEA No. \_\_\_\_\_)  No
- Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:
- a Single EIR? (see 301 CMR 11.06(8))  Yes  No
  - a Special Review Procedure? (see 301CMR 11.09)  Yes  No
  - a Waiver of mandatory EIR? (see 301 CMR 11.11)  Yes  No
  - a Phase I Waiver? (see 301 CMR 11.11)  Yes  No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres):

The project cost is approximately \$129,000 to be funded 50% each by the Towns of Barnstable and Yarmouth, Massachusetts. The project does not require a land transfer from the Commonwealth.

Are you requesting coordinated review with any other federal, state, regional, or local agency?  
 Yes (Specify \_\_\_\_\_)  No

List Local or Federal Permits and Approvals: Orders of Condition from Barnstable and Yarmouth Conservation Commissions; Individual Water Quality Certificate from DEP.

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- |   |                                       |  |
|---|---------------------------------------|--|
| <input type="checkbox"/> Land                         | <input type="checkbox"/> Rare Species | <input type="checkbox"/> Wetlands, Waterways, & Tidelands      |
| <input type="checkbox"/> Water                        | <input type="checkbox"/> Wastewater   | <input type="checkbox"/> Transportation                        |
| <input type="checkbox"/> Energy                       | <input type="checkbox"/> Air          | <input type="checkbox"/> Solid & Hazardous Waste               |
| <input checked="" type="checkbox"/> ACEC 11.03(11)(b) | <input type="checkbox"/> Regulations  | <input type="checkbox"/> Historical & Archaeological Resources |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
<b>LAND</b>				<input checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input checked="" type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/Extension Permit <input type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i>
Total site acreage	<b>0.2±</b>			
New acres of land altered		<b>0</b>		
Acres of impervious area	<b>0.1</b>	<b>0</b>	<b>0.1</b>	
Square feet of new bordering vegetated wetlands alteration		<b>0</b>		
Square feet of new other wetland alteration		<b>0</b>		
Acres of new non-water dependent use of tidelands or waterways		<b>0</b>		
<b>STRUCTURES</b>				
Gross square footage	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	
Number of housing units	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	
Maximum height (in feet)	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	
<b>TRANSPORTATION</b>				
Vehicle trips per day				
Parking spaces	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	
<b>WATER/WASTEWATER</b>				
Gallons/day (GPD) of water use	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	
GPD water withdrawal	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	
GPD wastewater generation/treatment	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	
Length of water/sewer mains (in miles)	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	

**CONSERVATION LAND:** Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

- Yes (Specify \_\_\_\_\_)  No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

Yes (Specify \_\_\_\_\_ )  No

**None of the land within the project area is subject to a restriction that requires a release.**

**RARE SPECIES:** Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

Yes (Specify: \_\_\_\_\_ )  No

**HISTORICAL /ARCHAEOLOGICAL RESOURCES:** Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

Yes (Specify :  No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify \_\_\_\_\_ )  No

**AREAS OF CRITICAL ENVIRONMENTAL CONCERN:** Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify:)  No

The Mill-Keveney Lane Bridge, on the side of Town of Barnstable lies within the Sandy Neck Barrier Beach System Area of Critical Environmental Concern (Figure 6). The portion of the bridge in Yarmouth is not within the ACEC; that is, the centerline of Mill Creek serves as both the town boundary as well as the ACEC boundary. The Mill-Keveney Lane Bridge is a one lane bridge crossing over Mill Creek.

**PROJECT DESCRIPTION:** The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (You may attach one additional page, if necessary.)

The Town of Barnstable, through its Department of Public Works is proposing improvements to the east (Keveney Lane in Barnstable) and west (Mill Lane in Yarmouth) approaches and the rehabilitation of the Mill/Keveney Lane Bridge over Mill Creek. The total project length is approximately 343 feet and will include structural improvements to the bridge, roadway approach and drainage improvements. The project will include reconstruction of portions of the superstructure of the bridge along with abutments and piers to restore the load carrying capacity of the bridge while refurbishing the bridge's façade and maintaining the historical and environmental setting of the area. Proposed roadway improvements for Mill Lane and Keveney Lane will include full depth pavement reconstruction, cold planning and overlay, curbing, berms and pavement striping for increased safety and improved traffic flow along the project area. A new drainage system will be installed to control runoff and improve water quality.

Mill Creek is approximately 150 feet wide and flows northwards from Hallets Millpond into Cape Cod Bay. According to the most recently published Natural Heritage Atlas (2006) by the Natural Heritage and Endangered Species Program, the entire project area lies within the estimated habitat of rare wildlife (Figure 3). The Mill-Keveney Lane Bridge, on the side of the Town of Barnstable, lies within the Sandy Neck Barrier Beach System Area of Critical Environmental Concern (ACEC) (Figure 6). The immediate vicinity of the bridge is dominated by salt marsh cord grass (*Spartina alterniflora*) and salt meadow cord grass (*Spartina patens*) located in the upper marsh. Wetland resource areas will be protected from impacts during construction through the implementation of an erosion and sedimentation control program. This program includes provisions to minimize areas of disturbance through phasing and sequencing, limit

erosion through stabilization, and prevent sediment from leaving the site by installing structural controls. Runoff generated in and around the project site will be collected in two new deep sump catch basins with hoods and discharged to four new 4'X 8' leaching galleys to reduce runoff related erosion and to treat stormwater runoff prior to release to the waterway. These drainage and water quality treatment improvements will serve to satisfy the policies developed by the Massachusetts Department of Environmental Protection (DEP) and Office of Coastal Zone Management (CZM).

The Mill/Keveney Lane Bridge (MHD Bridge No. B-1-5) was built in 1978 and carries one lane of traffic between the Towns of Barnstable and Yarmouth over Mill Creek (Figure 1 and 2). The bridge is approximately 60 feet long, 16 feet wide and provides a 13 foot wide travel lane and no sidewalks. The butted box beam superstructure is composed of two, equal 30 foot spans. The bridge has a bituminous concrete wearing surface, cast-in-place concrete curbing and a railing system consisting of tube steel posts and timber rails. The bridge substructure consists of a cast-in-place concrete pier and two abutments, each supported by steel H-piles. The abutments and pier are visually concealed by stacked and mortared stonework although this too has deteriorated over the course of time. The west approach (Town of Barnstable) of the bridge is elevated above the surrounding tidal flats by stone and mortar retaining walls on both sides of the road. Timber railing posts, connected to the wall via concrete blocks inlaid into the stone, are located on both sides. Traffic is contained by means of timber and concrete posts.

Under the existing conditions, significant erosion was observed, occurring primarily at the roadway edges of both approaches. On the west approach, the gap between the bottom of the timber guardrail and top of the asphalt roadway permits runoff to flow over the top of the walls causing erosion. Additionally, due to the relatively narrow waterways under the bridge, incoming tides produce high velocity flow rates. Tidal flow has deteriorated portions of the abutment and pier stonework. The erosion of stonework has also led to scouring of the abutment. If the bridge is left in its existing condition, it will become unsafe for vehicles and necessarily taken out of service. This in turn, would cause detours, increase travel times, and increased response times for emergency vehicles. Furthermore, the tidal action has begun to erode the tidal flats near the bridge approaches. In time, this erosion can begin to undermine the foundations of the approach walls. The bridge footprint will largely be replaced in kind, there will be no long term impact to the environment and there are no similarly viable alternatives to the project.

**LAND SECTION – all proponents must fill out this section**

**I. Thresholds / Permits**

A. Does the project meet or exceed any review thresholds related to **land** (see 301 CMR 11.03(1))  
 \_\_\_ Yes  No; if yes, specify each threshold:

**II. Impacts and Permits**

A. Describe, in acres, the current and proposed character of the project site, as follows:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Footprint of buildings	N/A	N/A	N/A
Roadways, parking, and other paved areas	N/A	N/A	N/A
Other altered areas (describe)	N/A	N/A	N/A
Undeveloped areas	N/A	N/A	N/A

B. Has any part of the project site been in active agricultural use in the last three years?  
 \_\_\_ Yes  No; if yes, how many acres of land in agricultural use (with agricultural soils) will be converted to nonagricultural use?